IN THE CLAIMS:

Kindly amend the claims so as to read as follows:

(Currently Amended) A device for exciting surface plasmons, including light illuminating
means, a transparent substrate having a ridge formed in a striped manner, a metal layer
covering side surfaces of said ridge and their neighboring region, and a thin metal film
formed on a top face surface of said ridge,

wherein said light illuminating means is arranged so as to illuminate said ridge with light which is linearly polarized in a plane that includes a longitudinal direction and a normal direction of the top surface of said striped ridge, said metal layer is provided for gradually narrowing a width of said light advancing in a depth direction in said ridge, and evanescent waves caused by said light are emitted from said light illuminating means and transmitted through said transparent substrate and said thin metal film can excite surface plasmons in said thin metal film.

- 2. Cancelled, without prejudice.
- 3. (Previously Presented) The device for exciting surface plasmons according to claim 1, wherein the light emitted from said light illuminating means is convergent light.
- 4. (Previously Presented) The device for exciting surface plasmons according to claim 1, wherein shape and dimensions and refractive index of said ridge, and said metal layer are set such that the light emitted from said light illuminating means and directed to said ridge reaches said thin metal film in an area smaller than a width of said ridge.

- 5. (Previously Presented) The device for exciting surface plasmons according to claim 1, wherein said metal layer is formed of a conductor, and said thin metal film is formed of one of gold, silver, copper and aluminum.
- 6. (Previously Presented) A surface plasmon microscope, including the device for exciting surface plasmons as recited in claim 1, a photodetector for receiving light reflected by said thin metal film and said metal layer, and movable support means for positioning a surface of a specimen in the vicinity of said thin metal film and for scanning the surface of the specimen.